Work Ord Wednesday, Jun				*120	218*							Page 1	L
Item ID: Revision ID:	D3413-1			Accept	*N900	040	100)*	Setup		···IVI	S1*	
Item Name:	O-Ring									Stop	*N	S2*	
Start Date: Required Date: Reference:	6/04/14 : 6/04/14	Start Qty: 12.00 Req'd Qty: 12.00	*1 <i>9</i> * *1 <i>9</i> *		Cust Item Customer:								
Approvals:	Process Pl	lan: MLJ	Date: 14-06-0	SPC (Y/N):		eate:			Run	Start Stop	^I <i>V</i> I	R1* R2*	
Sequence ID/ Work Center I	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	t Re		Reject Number	Insp. Stamp	
Draw Nbr	Re	evision Nbr											_
D3413	Re	ev A											
100		FLOW WATER JET		0.00				19		0		DAS 23	- 4.06.26
Waterjet FLOW CNC Water	•	Memo 1-Cut as per Dwg Rev:_ Prog Rev:_		0.00		PLM	14-	-06-	27				, == 0 &
		2- Deburr ar	nd drill hole if required as p	per dwg D3413 & QSI018 4	l.1 .								
110		QC2- Inspect parts off m	achine FAI/FAIB	0.00	.ee							DAS 23	Wear ar
110 QC		Memo		0.00	• .			19				9-89	14-06-26

Memo

Quality Control

DQA:			Date:												DART
QA Closed:			Date:			WORK ORDER NON-	-CC	NFOI	RMANCE / UI		W	ork Order up	date only		AEROSPACE
						DISPOSITION				AGAINST	DE	PARTMENT	PROCESS		
Work Orde	er:								a			1)4/a+a= 1a+[\neg	in-anima
0	1					Rework			Skid-tube	Crosstube Small Fab	-	D=0	Water Jet d. Eng. Coor.	\dashv	Engineering Quality
Part N	···.—	· · · · · · · · · · · · · · · · · · ·				Scrap Use-as-is			Machining noforming	Finishing	-	4	re/Packaging	-	Other
NCR N	lo.	*				Suspected Unapproved		HIEH	Large Fab	Composite		Nec/3tol	Supplier	\dashv	
NCK	.					Suspected Onapproved			Edige (db	Composite		J	oupplie! [L
Root					Desci	iption of work order update	Ī	nitial	Act	ion		Sign &			· · ·
Cause	Ì	Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	iption		Date	Verification		QC Inspector
Design			-												
Doc/Data															
Equip/Tooling						•									
Handling/Pre															
Material						•									
Operator 📑									and the second second						
Offset/Setup										-					:
Process	•														
Supplier															
Training															
Transport															
Unapproved															
. 65							FAI	ULT CA	regory			<u> </u>			
Landi	ng Gea	r			_	General		1 .			_	1	r	\neg	
•	Be	nding				Bend		•	rogram		_	Outside Dim	}	_	ressure/Forced
	Ce	ntre No	t Concer	ntric		BOM/Route		Grain			_	Over/Under	· · · · · · · · · · · · · · · · · · ·		et-up
	—	acks -			<u> </u>	Broken/Damage/Defect	$ldsymbol{ldsymbol{ldsymbol{eta}}}$	Hardwa			L	Part Incorre		—	emperature/Cure
	Cr	imp/Kin	k/Ripple	/Wave		Burrs			ion Incomplete/Ur	*	_	Part Lost/Mi	ssing		Veld
	—	iffs ·			<u> </u>	Contamination		4	ions Incomplete/U	Jnclear	_	Part Moved		\^	/rong Stock Pulled
	_	ushing			\vdash	Countersink		•	ned/off center		_	Positioned V			
	—	eat Trea			\vdash	Cut Too Short	\vdash	Mislabe			<u>L</u>	Power Loss/	Surge	0	ther
	$oldsymbol{oldsymbol{ o}}$	•	Strip in	Tube	<u> </u>	Drawing	\vdash	Misrea							
	⊢—	arks/Ch			\vdash	Drill Holes	<u></u>	Off-set							t/#II
	\vdash		equence			Finish	<u> </u>	-1	Calibration				<u> </u>		
	l Iw	ave/Tw	ist in Tuk	e		Fit/Function	L	Out of	Sequence						

Work Ord Wednesday, Jun				*120)218*							Page	÷ 2
Item ID: Revision ID:	D3413-1			Accept	*N900	040	100)*	Setup		*N:	S1*	
Item Name:	O-Ring									Stop	*N:	S2*	
Start Date:	6/04/14	Start Qty: 12.00	*12*		Cust Item I	D:							
Required Date	: 6/04/14	Req'd Qty: 12.00	*12*		Customer:								
Reference:													
Approvals:	Process P	Plan: Date	e:	Tooling:	Da	ate:	_		Run	Start	*N	R1*	
i	QC:	Date	e:	SPC (Y/N):	Da	ate:				Stop	*N	R ₂ *	•
Sequence ID/	ID.	Operation Description		Set Up/	Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp	
Work Center I	ш	Description QC8- Inspect parts - second chec	k .	Run Hours 0.00 DAS			Coue	Qıy	Qıy	1	Nullivei	Stamp	
1 On QC Quality Control	,	Memo		0.00	3			8					
*150 *150*		White Gloss(Ref:4.3.5.1) per QS:	1005 4.3-Alum	0.00				19	6	14	72)	8 8 8
Powdercoat		Memo	3100	0.00					- /				_
Powder Coating		START TIME: FINISH		OVEN TEMPERATURE	: :								

160

QC3- Inspect Part Finish

Quality Control

Memo

DQA:			Date:										DART
QA Closed:			Date:			WORK ORDER NON-	-CC	ONFO	RMANCE / UPDATE	W	ork Order up	date only	AEROSPACE
						DISPOSITION			AGAIN	ST DE	PARTMENT	/PROCESS	
Work Orde	er:					_				_			
						Rework			Skid-tube Crosstul	_	_	Water Jet	Engineering
Part N	۱٥٠	-				Scrap			Machining Small F	_	-1	d. Eng. Coor.	Quality
NCD						Use-as-is		Thern	noforming Finishi		Kec/Stoi	e/Packaging Supplier	Other
NCR I	۱O. _.			···		Suspected Unapproved			Large Fab Composi	re[J	20ppilei [ا ا
Root					Desci	ription of work order update		nitial	Action		Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Design													
Doc/Data													
Equip/Tooling				•									
Handling/Pre	Ш												
Material							·						
Operator													
Offset/Setup			!										
Process	Щ		1	ļ									
Supplier				1									
Training													
Transport													
Unapproved													
							FA	ULT CA	TEGORY				
Landi		1			_	General	_	ı .		_	٦.	_	¬
		Bending			<u> </u>	Bend		4 .	Program	\vdash	Outside Dim	 	Pressure/Forced
		Centre No	ot Concei	ntric		BOM/Route	L	Grain		<u> </u>	Over/Under		Set-up
		Cracks				Broken/Damage/Defect		Hardwa		<u> </u>	Part Incorre	 	Temperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs	<u> </u>	┨ `	ion Incomplete/Unqualified	<u> </u>	Part Lost/Mi	ssing	Weld
		Cuffs				Contamination		4	tions Incomplete/Unclear	<u> </u>	Part Moved	Ĺ	Wrong Stock Pulled
	<u></u>	Crushing				Countersink	_	- 1	gned/off center	L	Positioned V	_	¬
		Heat Trea			<u> </u>	Cut Too Short	<u></u>	Mislabe			Power Loss/	Surge	Other
	├	Inspectio	•	Tube		Drawing	\vdash	Misrea					
•		Marks/Ch				Drill Holes	L	Off-set			·		·
	_	Turning S	-			Finish	<u>_</u>	4	Calibration .				
		Wave/Tw	ist in Tul	oe		Fit/Function	<u>L</u>	Out of	Sequence				

Work Order ID 1202	1218	3
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120218

Page 3 Wednesday, June 04, 2014 2:59:06 PM Item ID: D3413-1 Accept *N900040100* Setup Start **Revision ID:** Stop Item Name: O-Ring *19* **Start Date:** 6/04/14 **Start Qty: 12.00 Cust Item ID:** Required Date: 6/04/14 Req'd Qty: 12.00 *19* **Customer:** Reference: Run Start Process Plan: Date: **Tooling: Approvals:** Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool# Plan Reject Reject Accept Insp. **Work Center ID Description** Run Hours Qty Qty Number Stamp Code DAS 170 Identify as per dwg & Stock Location: 57550 0.00 28 *170* JUL 0 3 2014 9-89 Packaging 0.00 Memo Packaging 180 QC21- Final Inspection - Work Order Release 0.00 *120* MUZ 14-07-04 QC 0.00 WF 7-3 Memo Quality Control

DQA:			Date:						_				TAART
						WORK ORDER NON	-CC	ONFO	RMANCE / UPDATE	147	l. Od		AEROSPACE
QA Closed:			Date:							W	ork Order up	date only	
Work Orde	r.					DISPOSITION			AGAIN	NST DE	PARTMENT	/PROCESS	
Work Order	'					Rework	1		Skid-tube Crosstu	ube	1	Water Jet	Engineering
Part N	0					Scrap			Machining Small I	_	Pro	d. Eng. Coor.	Quality
1 41614	٠. —					Use-as-is	1		noforming Finish		1	re/Packaging	Other
NCR N	ο.					Suspected Unapproved	1		Large Fab Compos	_		Supplier	
						· · · ·	1						
Root					Desc	ription of work order update	Ī	nitial	Action		Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	n QC Inspector
Design													
Doc/Data	_												
Equip/Tooling	_												
Handling/Pre	_												
Material 15		U:											
Operator	_												
Offset/Setup	4											,	
Process	_												
Supplier	4												
Training													
Transport	4												
Unapproved					L		ΓΛ	III T CA	TEGORY		<u> </u>		
Landin						General	ГА	<u>OLI CA</u>	IEGORY				
Landin	_	ar ending				Bend		Teolio/i	Program		Outside Dim	ensions	Pressure/Forced
	_	_	ot Concer	ntric	-	BOM/Route		Grain	Togram		Over/Under	·	Set-up
-		racks	or concer	iti it		Broken/Damage/Defect		Hardwa	are		Part Incorre		Temperature/Cure
	— i		nk/Ripple	/Wave		Burrs	-	4	ion Incomplete/Unqualified	-	Part Lost/Mi		Weld
<u> </u>		uffs	my mppic	,		Contamination		-1 '	tions Incomplete/Unclear		Part Moved	Ĭ	Wrong Stock Pulled
	_	rushing				Countersink		-∤	gned/off center		Positioned V	ا Vrong	
	_	eat Trea	t			Cut Too Short		Mislab			Power Loss/	Surge	Other
1	_		n Strip in	Tube		Drawing		Misrea	d				
	_	iarks/Ch				Drill Holes		Off-set					
	_		equence			Finish		Out of	Calibration				
		/ave/Tw	ist in Tub	e		Fit/Function		Out of	Sequence				

Wednesday, June 04, 2014 2:59:06 PM

Work Order ID: 120218

120218

Parent Item:

D3413-1

D3413-1

Parent Item Name: O-Ring

Start Date: 6/04/14

Required Date: 6/04/14

Page 1

Start Qty: 12.00

Required Qty: 12.00

Comments:

IPP Rev:A05.09.13New issueKJ/JLM

IPP Rev:B Now on Waterjet 07-05-28 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status	
M304B0.250X4.000		Purchased	No			100	f	13.8400	0.25	0			DAS	
*M304R0	250X4 () ///							**	_			23 9-89	1406-26

304 BAR .250 x 4.00

Location	Loc Oty	Loc Code	
MAT051	13.84		
123313	8.34		
M128247	5.5		128247

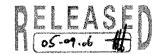
DQA:			Date:											TOART
						WORK ORDER NON	-CC	ONFO	RMANCE / UF			1	_	AEROSPACE 1
QA Closed:			Date:							<u>W</u>	/ork Order up	odate only	<u> </u>	
Work Orde	r:					DISPOSITION				AGAINST D	EPARTMENT	/PROCESS		
	_					Rework	1		Skid-tube	Crosstube		Water Jet		Engineering
Part N	0.					Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	Г	Quality
	-	_ -				Use-as-is	1	Thern	noforming	Finishing	Rec/Sto	re/Packaging		Other
NCR N	o					Suspected Unapproved]		Large Fab	Composite]	Supplier		
Root					Desc	I ription of work order update		Initial	Acti	ion	Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Descri	iption	Date	Verificatio	n	QC Inspector
Design														
Doc/Data														
Equip/Tooling														
Handling/Pre														
Material							ł							
Operator	_	:												
Offset/Setup	\Box													
Process	╝						İ							
Supplier														
Training														,
Transport														
Unapproved														<u> </u>
		·					FA	ULT CAT	TEGORY					
Landin	g G	ear				General		,		_	_			1
		Bending				Bend		Folio/P	Program	<u>L</u>	Outside Dim	ensions		Pressure/Forced
		Centre No	ot Concer	ntric	L	BOM/Route		Grain			Over/Under	tolerance		Set-up
		Cracks				Broken/Damage/Defect		Hardwa	are		Part Incorre	ci	$ldsymbol{le}}}}}}$	Temperature/Cure
		Crimp/Kin	k/Ripple	/Wave		Burrs	L	Inspect	ion Incomplete/Un	qualified	Part Lost/M	issing	L	Weld
		Cuffs				Contamination		Instruct	tions Incomplete/U	Inclear	Part Moved			Wrong Stock Pulled
[Crushing				Countersink		Misalig	gned/off center		Positioned V	Vrong	_	•
		Heat Trea	t			Cut Too Short		Mislabe	eled		Power Loss/	Surge		Other
[Inspection	n Strip in	Tube		Drawing	L	Misread	d					
		Marks/Ch	atter			Drill Holes		Off-set						
		Turning S	equence			Finish		Out of 0	Calibration			···		
] [1	Wave/Tw	ist in Tub	e		Fit/Function		Out of 9	Sequence					

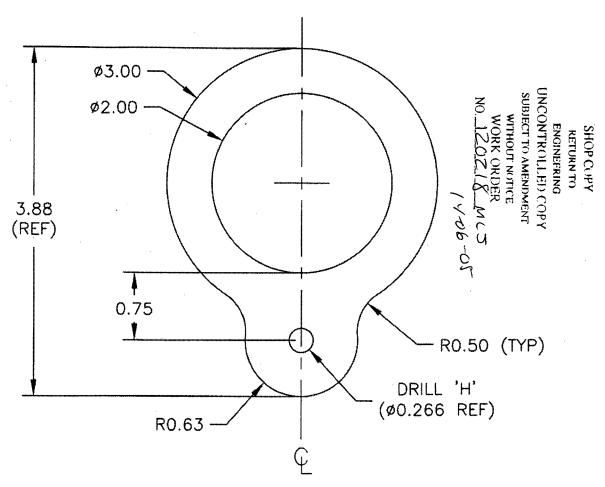
DART AEROSPACE LTD	Work Order:	120218
Description: Ring	Part Number:	D3413-1
Inspection Dwg: D3413 Rev: A		Page 1 of 1

	FIRST	ARTICLE IN	SPECTIO	ON CHE	CKLIST		
	X	¬.		_			
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Cor	nments
3.88	+/-0.030	<i>3.8</i> 8 "	_		ν	Thmos	5 '
Ø2.00	+0.012/-0.001	2,004			V		
0.75	+/-0.030	0.75	_		V		
Ø0.266	+0.006/-0.001	0.270"	_		V		
0.250	+/-0.010	0.261"	_		V		
<u>.</u>							
				-			
	DAS 23		DAS				
easured by:	9-89	Audited by:	27] 9-8 9		Prototype A	pproval:	N/A
Date:	14-06-26	Date:	14/6/	97		Date:	N/A
ev Date	Change		•			evised by	Approve
A 07.09.06	New Issue			-	K	J/JLM J	Œ



DESIG	° CP	DRAWN BY	DART	AEROSPACE USA, INC.
CHEC	KED _M_	APPROVED	DRAWING NO.	REV. A
	IM		D3413	SHEET 1 OF 1
DATE		TITLE	SCALE	
05.0	05.03.16		RING	1:1
A		05.03.16	NEW ISSU	JE





D3413-1 RING

- 1) MATERIAL: AISI 304/316 SS PLATE, 0.250 THICK (REF DART SPEC. M304S3GA)
- 2) FINISH: POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) DEBURR ALL SHARP EDGES 0.010 TO 0.020
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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